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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,506	07/24/2003	Katsuaki Minami	GOT 174	9005
23995	7590	09/08/2004	EXAMINER	
RABIN & Berdo, PC 1101 14TH STREET, NW SUITE 500 WASHINGTON, DC 20005			LOUIS JACQUES, JACQUES H	
			ART UNIT	PAPER NUMBER
			3661	

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/625,506

Applicant(s)

MINAMI ET AL.

Examiner

Jacques H Louis-Jacques

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 8 and 16-21 is/are rejected.
- 7) ☒ Claim(s) 6 and 9-15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/24/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1 -21 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2 and 11 of copending Application No. 10/621,394. Although the conflicting claims are not identical, they are not patentably distinct from each other because the operating conditions of the copending application corresponding to the vehicle acceleration/deceleration, vehicle speed, and transmission shift as recited in the dependent claims of the present application. Therefore, it would have been obvious to one skilled in the art at the time of the invention to be motivated to modify the claims of the copending application by omitting the vehicle operating conditions because such modification would provide a wide range of different operating conditions that can be used in determining the condition of the fuel being consumed, thereby enhancing the overall performance of the vehicle.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 7-8, 17-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Dussault [5,652,378].

Dussault discloses a fuel consumption estimating method for evaluating operating conditions applied to a vehicle. According to Dussault, a processor is provided for determining whether or not an operation which worsens fuel operation which worsens fuel economy has been performed, and when it is determined that the operation which worsens fuel economy has been performed; respectively calculating an actual amount of consumed fuel and an amount of fuel which would have been consumed had the operation which worsens fuel economy not been performed (column 1). According also to Dussault, there is provided that the processor calculates an amount of fuel consumed in excess (i.e., fuel consumption penalty or gain) due to the operation which worsens fuel economy by subtracting the amount of fuel which would have been consumed had the operation which worsens fuel economy not been performed from the actual amount of consumed fuel. See, in particular, abstract, figure 15 and column 2. The system, according to Dussault, also comprises a display device (e.g., 22) for displaying the calculated excess fuel consumption (abstract). See also column 9. Furthermore, Dussault discloses that the operating conditions are related to the vehicle acceleration or deceleration, vehicle speed, engine speed or rpm. Dussault also discloses a recording

device (e.g., memory) for recording the calculated excess fuel consumption, wherein the display device displays the excess fuel consumption recorded on the recording device after driving is completed (columns 6-8). As also described in columns 5-8, the display device (monitor), according to Dussault, displays the excess fuel consumption divided into the causes thereof. Dussault also discloses recording the frequency with which operations which worsen fuel economy are performed, wherein the display device displays the frequency with which operations which worsen fuel economy are performed, recorded on the recording device, after driving is completed, and wherein the display device displays the frequency with which operations which worsen fuel economy are performed according to the type of operation. See columns 7 and 8.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5-6 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dussault [5,652,378] in view of Strifler [4,494,404].

Dussault does not particularly teach an upshift condition as an operating condition of the fuel economy. Strifler, on the other hand, discloses a fuel consumption monitoring system for motor vehicles, wherein there is provided a processor (processing operation) that determines whether or not an upshift is possible based on the operating conditions of

the vehicle at present and following an upshift and following an upshift, and determines that the operation which worsens fuel economy has been performed when the vehicle runs without performing an upshift under conditions in which an upshift is possible. See abstract, figure 2, 4, 7 and columns 1-4. Strifler also discloses that processing operating (processor) determines that an upshift is possible when an engine rotation speed following an upshift is higher than a specified rotation speed (column 1), and a drive force at full load following an upshift is greater than a current running resistance (column 2). Also, as described in columns 1 and 3, Strifler discloses providing or generating a warning (an indication) to a driver when it is detected that the operation which worsens fuel economy has been performed. Thus, it would have been obvious to one skilled in the art at the time of the invention to be motivated to modify the fuel consumption estimating method and system of Dussault by incorporating the features from the fuel consumption monitoring system of Strifler because such modification would enable a driver to optimize gear ratio choice with regard to minimizing fuel consumption, while enhancing the performance of the vehicle.

Allowable Subject Matter

7. Claims 6, 9-10, 11-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

4,247,757	Crump, Jr.	Jan. 1981
4,286,560	Sagisaka et al	Sep. 1981
4,354,173	Kuhn et al	Oct. 1982
4,398,174	Smith, Jr.	Aug. 1983
4,630,027	Muhlberger et al	Dec. 1986
4,677,556	Habu	Jun. 1987
4,853,673	Kido et al	Aug. 1989
6,092,021	Ehlbeck et al	Jul. 2000
WO 00/58131 A1	Dutton et al	Oct. 2000

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacques H Louis-Jacques whose telephone number is 703-305-9757. The examiner can normally be reached on M-Th 6:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 703-305-8233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3661

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jacques H Louis-Jacques
Primary Examiner
Art Unit 3661

/jlj


JACQUES H. LOUIS-JACQUES
PRIMARY EXAMINER